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Mechanisms of linguistic bias: How words reflect and maintain stereotypic expectancies.

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Stereotypes about people are widespread and play a crucial role in social perception and interaction. An important question is how stereotypic expectancies about social categories are transmitted and maintained interpersonally. Although stereotypes and prejudice may be shared explicitly (e.g., racist speech, derogatory group labels, Leets & Giles, 1997; Simon & Greenberg, 1996), most people disapprove of the explicit expression of stereotypes and especially racism (Castelli et al., 2001; Monteith, 1993) and it appears that stereotypes are predominantly shared at a largely implicit level (see also Pearson & Dovidio, this volume). Research on linguistic bias has revealed a number of subtle systematic variations in language use that not only reflect stereotypic expectancies, but may also strengthen them in both sender and recipients. Research on this topic, however, has predominantly - and rather narrowly - focused on one linguistic aspect (i.e., language abstraction), where knowledge on other linguistic biases is scarce and scattered in the literature. In this chapter I review and aim to integrate the knowledge on the role of linguistic bias in stereotyping. I will first review existing evidence for linguistic biases and the effects they have on recipients, the sender, and the collective. Subsequently, I will discuss potential underlying mechanisms that these biases (may) have in common, and explore future areas of research.

Evidence for linguistic bias: Systematic variations in language use

The area of language use in relation to stereotypes deals specifically with language used when describing people and their behavior. Stereotypic beliefs about the targets of these descriptions surface in subtle linguistic biases. A linguistic bias can be defined as a systematic asymmetry in word choice as a function of the social category to which the target belongs. It should be noted that it is not necessarily harmful, nor evidence of discrimination and prejudice when expectancies about people are reflected in language use. Linguistic biases result from, and facilitate the transmission of essentialist beliefs about social categories.

Essentialist beliefs denote that members of a social category share a deep, underlying, inherent nature (“essence”), causing them to be fundamentally similar to one another and across situations (Carnaghi et al., 2008; Rhodes, Leslie, & Tworek, in press). To have – and share – such stable expectancies about people and social categories is often highly functional (Moskowitz, 2005). Yet, it may promote prejudice and discrimination when individuals are described and pre-judged on (negative) stereotypic-, rather than available individuating information. In this chapter, the term ‘bias’ refers to all instances – harmful or not – in which language use is colored by existing stereotypic beliefs, where unbiased language is devoid of such influence. I distinguish between research on the use of labels to refer to social categories and their individual members, and on language used to describe their behavior.

Category labels

One area of research on linguistic bias focuses on the labels used to refer to (members of) social categories. Research on sexist language, for instance, is concerned with asymmetries in references to female and male persons as a function of gender stereotypes. In such references a systematic bias in “markedness” has been observed, wherein expectancy inconsistent individuals are more explicitly marked or noted (Stahlberg et al, 2007; Romaine, 2001). Specifically, when referring to female and male person who are in a role or occupation that is inconsistent with the stereotypically expected role for his or her gender, people tend to add an explicit mention of the person’s sex (e.g., female surgeon, male nurse), where this does not occur when the person’s sex fits the respective gender role.

The tendency to explicitly mark unexpected gender roles appears to be even reflected in lexical gaps. In these cases the lexicon contains terms for stereotypically unexpected gender roles, but not for the expected (Stahlberg et al, 2007). For instance, the male term “family man” exists, but a female equivalent is lacking. Likewise, the label “career woman”, has no male equivalent. Apparently taking care of the family is stereotypically unexpected for

men, but self-evident for women. Having a career, in contrast, is unexpected for women, but expected for men (Romaine, 2001). Thus, the unexpected roles are marked, whereas their equivalent expressions (family woman, career man) are seemingly redundant as they refer to stereotypically expected and obvious situations.

A comparable asymmetry has been found in the use of more narrow labels for individuals who do not fit with general social category expectations. Individuals showing behavior that violates the general stereotype are referred to with labels that create a subcategory or subtype for the unexpected group (Devine & Baker, 1991). For example, with labels like “a nice Moroccan”, “a tough woman” or “African-American business man”, exceptions to the rule are placed in a new category that is narrower than the broad group (i.e., Moroccans, women, business men). For expectancy consistent individuals, however, the broad label is used.

Another systematic variation pertains the use of nouns compared to adjectives to describe a person. Nouns and adjectives can be exceedingly similar (e.g. being a Jew vs. Jewish). Nevertheless, Carnaghi et al., (2008, Study 6) showed that the use of nouns (compared to adjectives) increased when participants believed that a described characteristic resulted from a stable genetically determined aspect of the target (increased essentialism), rather than a transient, situationally determined property. Although these studies did not explicitly test the link with stereotypes, the findings strongly suggest that nouns are likely used to communicate stable stereotypic beliefs about a person. Carnaghi et al. (2008), suggested that persons exhibiting stereotypically expected characteristics of a social category are more likely referred to with a noun than adjective (e.g., Paul is *a* homosexual vs. is homosexual), because nouns better reflect the belief that it is an enduring and essentialist aspect of the person’s personality.

In the above variations of referential terms senders reveal their stereotypic expectancies about the targets and communicate these to recipients. Moreover, these biases may allow people to defend and maintain stereotypic knowledge (Devine & Baker, 1991). By specifically marking and mentioning the unexpected, and by creating subtypes, inconsistent information is compartmentalized, allowing the general rule to remain inviolate. A label like “a nice Moroccan” creates a narrow subtype that allows for the maintenance of a more general belief that *most* Moroccans are not nice. Information that fits the general expectation, in contrast, is unmarked or described with general category labels (e.g., noun).

Descriptions of behaviors

The previous section showed how stereotypic expectancies are reflected in referential labels. Comparable linguistic biases have been observed in descriptions of others’ behaviors. Most research on this topic followed from the Linguistic Category Model (Semin & Fiedler, 1988, 1992; Semin, 2011; Wigboldus & Douglas, 2007).

The LCM distinguishes four different word categories that vary on a concrete-abstract dimension. Most concrete are descriptive action verbs. These describe single, observable actions (e.g., Jack talks to Sue) and preserve perceptual features of the event. Most abstract are adjectives (Jack is flirtatious) that describe only the subject, show no reference to context or to specific acts and thus generalize across specific events and objects. Relative to concrete descriptions, abstract descriptions give more information about the stable dispositional qualities of the actor and less about the specific situation or context in which the actor finds himself (Semin & Fiedler, 1988, 1992; see also Fiedler & Mata, this volume).

The LCM formed the basis for a major contribution to the linguistic mechanism underlying the communication of stereotypes; the linguistic intergroup bias (LIB; Maass et al., 1989). The LIB refers to the hypothesis that desirable behaviors of ingroup members and undesirable behaviors of outgroup members are described at a relatively high level of

language abstraction (e.g., the ingroup member is helpful; the outgroup member is aggressive). In contrast, to describe an *outgroup* member showing desirable behavior and an *ingroup* member showing undesirable behavior, relatively low levels of language abstraction are used (e.g., the ingroup member hits somebody; the outgroup member opens the door for someone; Maass et al., 1989). Because the different LCM categories elicit different cognitive inferences, the implicit meaning that is communicated varies as a function of level of abstraction. By describing desirable behavior of ingroup members and undesirable behavior of outgroup members abstractly, these behaviors are portrayed as stable and highly diagnostic traits. Undesirable behavior of ingroup members and desirable behavior of outgroup members, in contrast, are portrayed as situationally determined and exceptions to the rule.

Research demonstrated that the LIB mechanism also operates outside an intergroup context and may result from general expectancies (Maass, Ceccarelli & Rudin, 1996; Maass, et al., 1995). Given that expected behavior is considered to be more stable, diagnostic and typical than unexpected behavior it is more appropriately described with abstract terms. Wigboldus, Semin and Spears (2000) demonstrated that stereotypic expectancies give rise to differences in language abstraction, and termed this phenomenon the Linguistic Expectancy Bias (LEB). For example, to describe behavior that is inconsistent with the male stereotype (e.g., crying), people use relatively more concrete language (e.g., he has tears in his eyes). In contrast, when describing a woman demonstrating the same – but female stereotype consistent – behavior, people tend to use more abstract language (e.g., she is emotional).

Another linguistic bias focusing on behavior descriptions is the Stereotypic Explanatory Bias (SEB; Sekaquaptewa et al., 2003). SEB pertains to the tendency to provide relatively more explanations in descriptions of stereotype inconsistent, compared to consistent behavior. Learning about stereotype incongruent behaviors instigate explanatory processing, which is reflected in an explanation to make sense of the incongruity. Sekaquaptewa et al.,

(2003) demonstrated that the tendency to engage in SEB was related to prejudiced behavior. The more external, situational explanations White participants provided to explain stereotype inconsistent behavior of Black individuals (e.g., Marcellus got a job at Microsoft, because he knew someone there) the more negative behavior they showed towards a Black partner in an interracial interaction.

A recent extension to the linguistic bias literature pertains to the use of negations. The Negation Bias (NB; Beukeboom, Finkenauer, & Wigboldus, 2010) entails that the use of negations (e.g., *not stupid*, rather than *smart*) is more pronounced in descriptions of stereotype inconsistent compared to stereotype consistent behaviours. For example, if a sender's stereotypic expectancy dictates that garbage men are stupid, but a particular garbage man violates this expectancy by showing highly intelligent behavior, the sender is likely to reveal his prior expectancy by using a negation like *The garbage man was not stupid*. In contrast, for stereotype consistent behavior (e.g., The garbage man was stupid; The professor was smart), the use of negations is less likely.

In sum, the different linguistic biases described above demonstrate that people reveal their stereotypic expectancies in a number of subtle ways in their choice of words (see Figure 1). It appears that stereotype inconsistent information is in general described with relatively more narrow, specific or concrete terms than stereotype consistent information. This is shown in increased markedness and subtyping in reference to stereotype inconsistent individuals, in more concrete language (LIB, LEB), and more frequent specific situational explanations (SEB) in descriptions of stereotype inconsistent behaviors. The use of adjectives vs. nouns and negations vs. affirmations (NB) also appears to fit this general pattern, particularly when looking at the cognitive inferences that the different linguistic devices induce. This is what I will focus on in the next section.

Figure 1. *Overview of different linguistic biases, and the cognitive inferences they induce.*

<u>Target of description</u>	<u>Linguistic bias</u>	<u>Cognitive inferences</u> (sender and recipient)
Stereotype consistent person, or behavior		Dispositional attributions; informative about person, high enduringness, high stability and repetition likelihood (= increased essentialism).
Stereotype inconsistent person, or behavior		Situational attributions informative about specific situation, low enduringness, low stability, low repetition likelihood.

Note. LIB / LEB = Linguistic intergroup / expectancy bias, SEB = Stereotypic explanatory bias, NB = Negation bias. *Not empirically demonstrated with respect to stereotypes.

Effects of linguistic bias

The previous section showed that stereotypic expectancies of senders surface in subtle variations in language use. The significance of these linguistic biases lies in the fact that they implicitly communicate these stereotypes to message recipients, and thereby contribute to the transmission and maintenance of socially shared stereotypes. These effects occur mainly by influencing the cognitive inferences of recipients of biased messages, but may also affect the sender, and the collective (Holtgraves & Kashima, 2008). Importantly, the inferences recipients draw from biased descriptions tend to be consistent with the sender's stereotypic expectancies (Maass et al., 1989; Wigboldus et al., 2000), and consequently the stereotypic view about the described actor is transmitted.

Recipient inferences

The type of term used to refer to a person clearly has a strong effect on the impressions recipients form (see Maass, Suitner, & Merkel, this volume). Verbal category labels activate

categorical representations containing additional information that the observed target itself does not convey. Derogatory group labels (e.g., fag, nigger) activate a different, more negative representation than neutral labels (e.g., gay, afro-american; Carnaghi & Maass, 2007). Where recipients may intentionally regulate negative reactions to such explicit derogatory ethnic labels, because of egalitarian social norms (Simon & Greenberg, 1996), these corrections are unlikely when stereotypes surface in the above reviewed subtle implicit biases. Consequently, seemingly harmless differences in labels can exert significant effects on the impressions that recipients draw.

A recent study (Foroni & Rothbart, 2011) showed that observers, in estimating the weight of persons, are influenced by the labels presented with the targets, even when these labels are self-generated. Participants judged silhouette drawings of body types, presented either without labels, with weak category labels (below-average; average; above-average) or with strong labels (anorexic; normal; obese). By looking at the judged similarity and the estimated weight of body types, it was shown that the presence of a label reduced perceived differences between members of the same category (assimilation), while exaggerating the differences between members of different categories (contrast). These categorization effects were stronger for strong labels, but even weak labels showed significant differences compared to unlabelled conditions.

These findings are largely in line with the previously described difference between nouns (that would constitute a strong label) and adjectives (Carnaghi et al., 2008). This research showed that nouns (e.g. a Jew) have a more powerful impact on impression formation than adjectives (e.g. Jewish). Compared to adjectives, nouns more strongly induce stereotype congruent inferences about the target (e.g., always goes to the Synagogue), and simultaneously inhibit counterstereotypical inferences (e.g., always goes to church). Furthermore, nouns inhibit alternative classifications. A person described with a noun (e.g., an

athlete) rather than adjective (e.g., athletic) is less likely categorized in alternative categories (e.g., an artist; Carnaghi et al., 2008). Moreover, nouns induce stronger essentialist attributions; the relevant characteristic is seen as a more profound and unchangeable behavior tendency, as more informative about the person, to have a higher enduringness, and higher likelihood of future repetition (Carnaghi et al., 2008).

It appears then that labels used to refer to stereotype consistent individuals (i.e., nouns, and unmarked labels) induce more stereotype confirming inferences, as compared to labels used to refer to stereotype *inconsistent* individuals (i.e., marked and subtyped reference). The ‘strong’ – stereotype consistent – labels induce recipients to (1) more strongly categorize the individual, (2) more strongly activate the associated stereotypic expectancies with the category, and (3) to infer that the characteristic is more essentialist, profound and enduring.

The inferences that recipients draw from biased behavior descriptions (LIB and LEB) show a comparable pattern. It has consistently been shown that the relatively concrete language used in stereotype inconsistent messages causes recipients to infer that the behavior is unexpected, is an exception to the rule, and more likely caused by situational circumstances than by dispositional factors. In contrast, the more abstract language used in stereotype consistent messages implies that the behavior is expected, more likely caused by the actor’s stable dispositional characteristics, and thus more likely to be repeated and to generalize across situations (Maass et al., 1989; Wigboldus et al., 2000). This pattern of inferences shows that higher abstraction implies greater essentialism. Likewise, generic (vs. specific) statements about social categories (e.g., “Italians love pasta”) have been shown to induce more essentialist stereotypic beliefs (Rhodes et al., in press).

Although recipient inferences to descriptions containing explanations (SEB; Sekaquaptewa et al., 2003) have to my knowledge not been specifically tested, it seems apparent that they should induce lower essentialist inferences. That is, the explanations people

tend to give for stereotype inconsistent behavior provide an external situational attribution, which by definition suggest it is a transient behavior caused by situational rather than stable dispositional factors.

A similar pattern is observed with respect to the negation bias (NB; Beukeboom et al., 2010). Negations (e.g., not stupid), compared to affirmations (e.g., smart), were shown to induce lower dispositional than situational attribution in recipients, and a lower repetition likelihood. Recipients also inferred from negations that the sender had an opposite prior expectancy. Thus again, the language used to describe stereotype inconsistent behavior implies reduced essentialism for the target.

With respect to negations two additional effects can be mentioned. First, when a negation rather than affirmative antonym is used to describe stereotype inconsistent behavior, stereotype consistent concepts are introduced to the discourse. Research suggests that negations make associations with the negated concept more accessible, and consequently may activate the opposite of the message content in recipients (Giora et al., 2007; Grant, Malaviya, & Sternthal, 2004; Mayo, Schul, & Burnstein, 2004). Thus, when negations are used to describe stereotype inconsistent behavior (e.g., the garbage man is not stupid), stereotype consistent associations are activated and reinforced in a recipient. Second, by introducing information via negation, senders convey a mitigated, more neutral version of the described event (see Fraenkel & Schul, 2008; Giora et al., 2005). When intelligent behavior of a garbage man is described as “not stupid”, this activates negative associations, it communicates that the positive performance is unexpected and inessential, and conveys a less positive meaning than the positive behavior allows. Thus by means of negations, senders share negative (or positive) prior expectancies with recipients.

In sum, the different linguistic biases are comparable in the pattern of inferences they induce (see Figure 1). Importantly, the induced inferences are congruent with the stereotypic

expectancies that induce the biased word choice in the first place. Senders choose other linguistic devices to describe stereotype consistent versus inconsistent behaviors and actors. By means of these linguistic devices senders reveal, and activate their stereotypic beliefs in recipients.

Effects on the sender

Although this has not been studied extensively, based on other research it seems likely that biased language use also has a stereotype confirming effect on the sender. The influence of verbal communication on subsequent cognition of the sender is well established. The classic demonstration probably being the *saying-is-believing* effect (Higgins & Rholes, 1978), which shows that communicators end up believing and remembering what they said rather than what they originally learned about a target. Subsequent research has confirmed that people's mental representations of an experience can be profoundly shaped by how they verbally describe it (for reviews McCann & Higgins, 1990; Marsh, 2007).

In the context of linguistic bias, research by Karpinski and Von Hippel (1996) is particularly relevant. They studied whether the LEB helps people maintain their expectancies in the face of incongruency. They experimentally manipulated an initial expectancy (positive vs negative) of a target person Scott. Subsequently, participants rated a number of target person descriptions that varied in language abstraction, after which the extent to which the initial expectancy was maintained was determined. Their results replicated the LEB effect; expectancy congruent (vs incongruent) behaviors were preferably described more abstractly. Importantly, the more participants displayed the LEB in their descriptions the more their initial expectancy was maintained. This effect was especially the case for behaviors of moderate valence (Karpinski & Von Hippel, 1996).

In sum, it appears that people not only communicate information to others in a subtly biased fashion, the sender's linguistic choices also appear to reverberate on the sender. The

act of verbalizing a stereotypic expectancy in language, albeit in a subtly biased manner, may reconfirm and strengthen existing stereotypes in the sender. The sender is, just as a recipient, prone to activate stereotype confirming inferences.

Collective effects

Moreover, the social cognitive implications of biased language use go beyond the senders' and recipients' individual cognitions (Holtgraves & Kashima, 2008; see also Peters and Kashima, this volume). People usually talk about other people and their behavior in interpersonal conversations. In such conversations conversation partners create a shared view in a dynamic collaborative process. Research (Echterhoff et al., 2005, Hellmann et al., 2007; Kopietz et al., 2010) has demonstrated that the saying-is-believing effect (Higgins & Rholes, 1978) mainly occurs when sender and recipient create a shared reality, and mutually recognize that they have reached understanding about a target person (i.e., Hardin & Higgins, 1996). Kashima et al., (2010) showed that the act of communicating about characteristics of a novel social category induced stronger dispositional attributions, and stronger beliefs that this was an immutable essence of the category. This increased essentialism occurred especially when the senders' descriptions were elaborately grounded (i.e., accepted by the conversation partner; Clark, 1996).

The above described biases reveal how stereotype consistent and inconsistent information is confirmed and strengthened through linguistic biases. It explains why stereotypical views are difficult to disconfirm and resistant to change (Biernat & Ma, 2005; Rothbart & Park, 1986). They perpetuate, even when stereotype inconsistent behavior is being described.

Underlying mechanisms of linguistic bias

Most research on potential underlying mechanisms of linguistic biases has been done with respect to the LIB and LEB. Maass et al (1995) distinguished two independent mechanisms that give rise to the LIB. One mechanism is argued to arise from implicit cognitive associations and expectancies, the other from motivational or strategic factors (Wigboldus & Douglas, 2007). Although these mechanisms are linked to the LIB and LEB, it is plausible that both mechanisms are in operation to produce the other linguistic bias effects. In the following two sections I successively elaborate on these initially proposed mechanisms and subsequently propose a third mechanism.

Cognitive mechanism: Spontaneous reflection of cognitive expectancies

This first mechanism pertains to the idea that linguistic biases are the result of intrapersonal cognitive processes. The words that people choose when describing the behavior of individuals belonging to different social categories unintentionally reflect existing associations and expectancies. In studies on the underlying mechanisms of the LIB, Maass et al., (1995) and Maas et al., (1996) demonstrated that expectancy consistent behaviors based on stereotypes about Northern and Southern Italians are described at a higher level of abstraction than expectancy inconsistent behavior. This effect was shown to be independent of the desirability of behavior and the in- vs out-group membership of the participant. As described above, further research confirmed this mechanism in research on the LEB (Karpinski & Von Hippel, 1996; Wenneker et al., 2005; Wigboldus et al., 2000).

Likewise, the negation bias (Beukeboom et al., 2010) is argued to result from existing stereotypic associations. The stereotype literature suggests that, upon perceiving (or reading about) the behavior of an actor, people automatically activate the mental representations associated with the social category to which the person belongs (Devine, 1989; Fiske, 1998; Lepore & Brown, 1997). For example, the category label professor activates stereotype

consistent trait terms such as *smart* and inhibits stereotype inconsistent trait terms such as *stupid* (Dijksterhuis & Van Knippenberg, 1996). This should make the use of terms that are stereotype consistent with the activated social category more probable in descriptions of category members. Because of the decreased accessibility of stereotype inconsistent terms, their use will be less likely. These differences in accessibility may explain why the description of unexpected dim behavior of a professor is relatively likely to contain a negation (e.g., not smart), whereas the same behavior is described with an affirmation when it is consistent with expectations (e.g., the garbage man is stupid).

Perhaps like most linguistic choices, the reflection of stereotypic beliefs in language use typically occurs unintentionally and operates outside of people's awareness (Franco & Maass, 1996; Maass, 1999). Consequently, the effects of stereotypic expectations on linguistic choices appear to be difficult to inhibit (Franco & Maass, 1996). Hence, the LIB/LEB (Von Hippel, Sekaquaptewa & Vargas, 1997) and SEB (Sekaquaptewa et al, 2003) have been used as implicit measures of prejudice. It seems reasonable to assume that the choice for a noun or adjective (Carnaghi et al., 2008), and markedness in reference occurs largely outside awareness, and results from implicit cognitive processes. When a person's characteristics are encoded as consistent with an activated category, the person will subsequently be more likely referred to using a noun and unmarked reference.

It thus seems that people's linguistic choices automatically reflect existing social knowledge. However, such linguistic choices may also be driven by a fundamental need to maintain existing beliefs. When people are confronted with inconsistencies they have been shown to attempt to defend and maintain their stereotypic knowledge, and adopt a variety of cognitive strategies that allow them to keep the general stereotype inviolate (e.g., Kunda & Oleson, 1997; Yzerbyt, Coul & Rocher, 1999; Zoe & Hewstone, 2001). Exactly these cognitive strategies may be reflected in linguistic biases. When people are confronted with

stereotype inconsistent events they tend to (a) compartmentalize it (i.e., marking, subtyping), (b) to perceive it as a transient property that is under the influence of situational factors rather than stable dispositional factors (LIB, LEB, NB), (c) to explain the inconsistency (SEB), (d) to mitigate the valence of the event, and simultaneously connect it to concepts that fit the stereotype (NB). In contrast, consistent information is processed such that it allows one to reconfirm existing stereotypes, (e) by using strong category labels (nouns) and more abstract language (LIB, LEB) implying stability and essentialism.

Motivational mechanism: Communication goals and strategic language use

The second mechanism that has been proposed to give rise to linguistic bias is motivational in nature. Utterances obviously do not merely express privately held beliefs, they are tailored to suit communication goals (Higgins, 1992). Senders may want to achieve something in a recipient (e.g., persuade, derogate, ingratiate), and they need to take into account the recipient's level of understanding and acceptance (Clark & Brennan, 1991; Clark & Krych, 2004; Krauss & Fussell, 1991). Thus, when formulating an utterance people adapt their language on the basis of what they intend or need to achieve interpersonally, in a recipient.

Research on the LIB demonstrated that the use of predicates of different abstraction may be driven by a motivation to protect one's social identity (Maass et al., 1995; Maas et al., 1996; Wigboldus & Douglas, 2007). It was demonstrated that the LIB was more pronounced in intergroup settings wherein the ingroup was threatened (e.g., hostility between Northern and Southern Italians). The LIB allows a sender to convince oneself or recipients of one's positive essentialist group identity.

Other research confirmed that motivational factors and interpersonal communication goals have an important effect on linguistic bias. Douglas and Sutton (2003) showed that explicit communication goals have a strong effect on the use of language abstraction. When

someone has the intent to favorably portray a person, he or she adopts abstract predicates to describe positive behaviors and concrete predicates to describe negative behaviors. Such motivations to portray a person or social group in a positive or negative light may result from one's social role. For instance, prosecution and defense attorneys have been shown to strategically adopt different levels of abstraction to imply guilt and innocence of defendants (Schmid & Fiedler, 1998, Schmid et al., 1996).

Likewise, negations may be used strategically. That is, one is likely to use a negation when one wants to change a (assumed) recipient's view about a target (e.g., I am not stupid!). One may also use negations to mitigate the valence of a description (Giora et al. 2007; Fraenkel & Schul, 2008) and thus strategically describe someone's behavior in a more neutral manner. That is, to say that someone is "not smart" (compared to stupid) yields a weaker face threat and is more polite (Brown & Levinson, 1987).

In sum, the above mechanisms suggest that linguistic biases may result from implicit cognitive processes, or from interpersonal goals to portray a target in a particular way. These mechanisms, at least with respect to the LIB and LEB, have been shown to operate independently of each other (Maass et al., 1995; Maass et al., 1996; Wigboldus & Douglas, 2007), although communication goals tend to largely overrule the effects of existing expectancies (Douglas & Sutton, 2003). Based on other literature a third mechanism is proposed.

Interpersonal context and interactive processes

A third mechanism that likely determines biased message formulations arises from the interpersonal context and the interaction between individuals. The characteristics of recipients, and the sender's and recipient's relation to each other and the target, will determine whether linguistic biases occur (Freytag, 2008).

First, the communicative context may determine whether relevant stereotypes are activated. Wigboldus, Spears & Semin (2005) suggested that in an intragroup context (e.g., when females talk to females about females) a target's category membership (e.g., gender) is less likely to become salient. Consequently, stereotypic expectancies with this category are not activated, thus rendering it unlikely that linguistic biases occur. In an intergroup context, however (i.e., when either target or recipient is outgroup member), a required category activation is more likely, and linguistic bias is expected.

Second, senders tend to tune their formulations to recipients (Higgins & Rholes, 1978) and linguistic bias may thus arise from the assumed beliefs of a recipient. Carnaghi and Yzerbyt (2006, 2007), for instance, showed that participants showed stronger subtyping of a target person when they anticipated communicating their impression to an audience they thought had an opposing stereotype. This suggests that biased language use may even arise in unprejudiced senders when they communicate to (assumed) prejudiced recipients. However, the perceived expectancies in recipients might also induce a sender to either conceal one's own expectancies (and show less linguistic bias), or instead a motivation to argue against the beliefs of the recipient. A motivation to explain, teach, or interpret a behavioral event in a description towards a recipient with an opposing attitude may result in a reversal of, for instance, the LEB effect (Fiedler et al., 2003).

A particularly interesting situation occurs when the target of a behavior description is also the recipient. Variations in language can be employed strategically to put someone in a positive or negative light, to praise or denigrate the other. In these cases, the nature of the interaction is likely to affect the goal, and thus the occurrence of a linguistic bias effect. Semin, Gil de Montes and Valencia (2003) showed that when senders expected to cooperate with a partner the regular LIB pattern emerged; positive behaviors of the partner were described at a higher level of abstraction than negative behavior. When senders expected to

compete with a partner, however, the LIB pattern was reversed. This pattern only emerged when senders were told that their message would be passed on to their partner, suggesting that a goal to influence the relation with the partner determined the LIB effect.

In sum, the interpersonal context may determine whether or not stereotypes become activated (Carnaghi & Yzerbyt, 2006, 2007; Wigboldus et al., 2005), and may evoke particular communication goals, either aimed at explaining something or convincing a recipient (Fiedler et al., 2003), or at strategically influencing interpersonal relations (Semin et al., 2003). As described above, contextually induced communication goals may overrule effects of activated stereotypic expectancies (Douglas & Sutton, 2003), and can consequently completely reverse linguistic biases.

Conclusion and future research

This chapter reviewed research on linguistic bias in communications about stereotype relevant information. Different linguistic biases show that people tend to systematically vary their language in communications about stereotype inconsistent as compared to stereotype consistent information. The reviewed linguistic biases suggest that stereotype inconsistent information is, in general, reflected in relatively more specific and concrete linguistic predicates than stereotype consistent information. This is in line with the idea that stereotype inconsistent information demands elaboration. People tend to explain inconsistencies, by compartmentalizing and attributing it as information separate from the general stereotype. These cognitive efforts occur at an intrapersonal level, but surface in language use and interpersonal conversations. The biased descriptions induce different cognitive inferences in both senders and recipients, implying that stereotype inconsistent (as compared to consistent) characteristics and behaviors are relatively less enduring, stable and dispositional. In other words, the descriptions used for stereotype inconsistent persons and behaviors imply lower

essentialism (see Figure 1). This pattern of inferences is stereotype confirming and maintains the stereotypic expectancies that instigate the biased descriptions.

The research described in this chapter shows that *how* people talk about stereotypic information is an important factor in stereotype maintenance. A complementary area of research focuses on *what* people tend to talk about in stereotype relevant communications. Research demonstrated that people are more likely to talk about information they share with other people (Fast et al., 2009), and that stereotype consistent information gets advantage over stereotype inconsistent information (Clark & Kashima, 2007; Kashima, Klein & Clark, 2007). The linguistic biases discussed in this chapter show that even when stereotype inconsistent information is introduced in communication, it is formulated in such a way that stereotypic knowledge remains intact. Even in the face of stereotype inconsistent information, stereotypes are continuously re-confirmed or strengthened. Communicating about stereotype relevant information allows one to verify stereotypes, and reaching acceptance of recipients may even strengthen one's privately held convictions about social categories. Consequently, when people communicate about stereotype relevant information they are more likely to essentialize category information, than when they simply memorize it (Kashima et al., 2010).

Stereotype confirming effects of linguistic biases are mainly expected when sender and recipient have common ground and share the same stereotypic expectancies about a target (Kashima et al., 2007; Ruscher & Duval, 1998). In these cases, provided that the relevant stereotypic expectancies are activated, a senders language will both reflect his or her own stereotypic expectancies and will concurrently be tuned to the perceived corresponding expectancies of recipients. By producing and receiving biased language, and by obtaining mutual agreement, both sender and recipient will reconfirm and strengthen their stereotypes. When common ground is lacking, however, effects may reverse. In these cases a sender may employ the same linguistic tools to explain or convince a recipient about stereotypic

expectancies in order to establish common ground (Fiedler et al. 2003). Future research may shed more light on the intra- and interpersonal mechanisms underlying linguistic biases.

The integrative approach adopted in this chapter enables predictions about the mechanisms and effects of different biases. An integrative methodological approach may be adopted to study how these different biases combine in spontaneous language use. Do they co-occur or does the use of one type of bias diminish the use of another? Future research may also reveal other biases in language use that undoubtedly exist (e.g., syntactic agency bias; László & Ehmann, this volume). In line with the biases described in the present chapter such other biases in language use may vary along a concrete- abstract dimension. For instance, a bias may exist within the use of different adjectives distinguished in breadth versus narrowness (Karpinski & Von Hippel, 1996; Karpinski et al., 2007). Broad adjective subsume more distinct behaviors (e.g., talented) than narrow adjectives (e.g., musical), rendering broad adjectives more abstract than narrow adjectives. Interestingly, this may correspond to differences between "concrete" adjectives derived from action verbs (IAV; help-helpful), versus state verbs (SV; like-likable) and "abstract" adjectives not derived from verbs (e.g., kind, generous). It has been suggested that differences between these adjectives should mirror the differences between the corresponding verbs (Semin & Fiedler, 1988; Semin, 1994). Consequently, there may be an expectancy maintenance mechanism relying upon adjective breadth (Hamilton et al., 1992), meaning that stereotype consistent (vs. inconsistent) manners are more likely described with broad rather than narrow adjectives.

Another extension may lie in several distinct word categories defined in the Linguistic Inquiry and Word Count (LIWC; Pennebaker et al., 2007, see also Chung & Pennebaker, this volume). A recent study (Beukeboom, Tanis & Vermeulen, in press) revealed a number of significant correlations between language abstraction as defined by the LCM and LIWC

variables in descriptions of social events. Particularly, an increased concreteness in language co-varied with the use of articles, numbers, and specific references to humans.

To conclude, research has revealed how seemingly harmless subtleties in language use can have a major impact in the maintenance of stereotypic representations. By revealing the mechanisms of these biases, people may become more aware of biased word choices, and potentially prevent potentially negative effects.

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